Datasheet for ABIN125883

anti-Psbd antibody (C-Term)

1 Image | 5 Publications

Go to Product page

Overview

Quantity:	50 µg
Target:	Psbd
Binding Specificity:	C-Term
Reactivity:	Arabidopsis thaliana, Chlamydomonas reinhardtii, Green bean, Hordeum vulgare subsp. spontaneum (Wild barley) (Hordeum spontaneum), Oryza sativa, Pisum sativum, Thalassiosira pseudonana
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB)

Product Details

Immunogen:	KLH-comjugated synthetic peptide derived from the C-terminal of known PsbD sequences including Arabidopsis pumila A4QJS8 , Hordeum vulgare P11849, Chlamydomonas reinhardtii P06007, Synechococcus sp. PCC 7002 P20898
Specificity:	Perfect across all full-length PsbD sequences from higherplants, lowerplants, cyanobacteria and unicellular algae except: -minorsubstitutions in some Prochlorococcus & Dinoflagellatesequences. The antibody should still work against these taxa,but it has not been tested yet. This antibody does not detectPsbA protein (D1).
Cross-Reactivity (Details):	Peptide target chosen from the N-terminal domain, nearly fully conserved within3-4 NtrA-related proteins from Arabidopsis thalina and with NtrC related proteinsfrom Chlamydomonas reinhardtii and Synechococcus sp. 7942 and othercyanobacteria .
Characteristics:	Expected / apparent Molecular Weight of the Antigene: 39.4 / 28-30 kDa

Product Details

Purification:	serum

Target Details

Target:	Psbd
Background:	AGI Code: ATCG00270 D2 protein (PsbD) forms the reaction core of PSII (Photosystem II) as a heterodimer with the D1 protein (PsbA). PsbD is homologous to the D1 protein, with slightly higher molecular mass of about 39,5 kDa. Accumulation of D2 protein is an important step in the assemply of the PSII reaction centre complex.
Molecular Weight:	expected: 39.4 kDa, apparent: 28-30 kDa
UniProt:	P20898, A4QJS8, P06007, P11849

Application Details

Application Notes:	Recommended Dilution: 1 : 5000 with standard ECL (WB).
Comment:	There is a confirmed cross-reaction with TLA1 protein in Chlamydomonas reinhardtii.For samples with a very low PSII content theremight be detection problems independent of the antibody. PSII proteins can vary in level depending upon liquid culture conditions. When the cells are in a stationary phase PSII content can drop to a very low level.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	For reconstitution add 100 µL of sterile water.
Handling Advice:	Please, remember to spin tubes briefly prior to opening them to avoid any losses that might occur from lyophilized material adhering to the cap or sides of the tubes. Once reconstituted make aliquots to avoid repreated freeze-thaw cycles.
Storage:	-20 °C

Publications

Product cited in:	Mou, Zhang, Dong, Fan, Xu, Cao, Xu, Wang, Ye: "Photoprotection in the green tidal alga Ulva prolifera: role of LHCSR and PsbS proteins in response to high light stress." in: **Plant biology**

Publications

(Stuttgart, Germany), (2013) (PubMed).

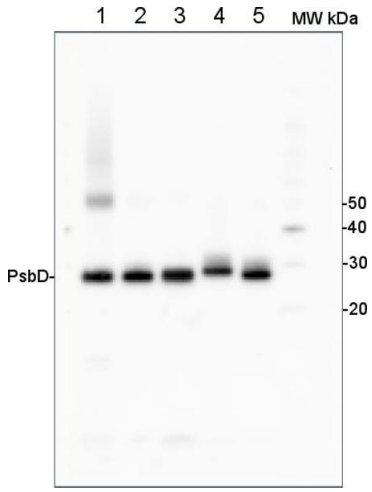
Signorelli, Casaretto, Sainz, Díaz, Monza, Borsani: "Antioxidant and photosystem II responses contribute to explain the drought-heat contrasting tolerance of two forage legumes." in: **Plant physiology and biochemistry : PPB / Société française de physiologie végétale**, Vol. 70, pp. 195-203, (2013) (PubMed).

Yamatani, Sato, Masuda, Kato, Morita, Fukunaga, Nagamura, Nishimura, Sakamoto, Tanaka, Kusaba: "NYC4, the rice ortholog of Arabidopsis THF1, is involved in the degradation of chlorophyll - protein complexes during leaf senescence." in: **The Plant journal : for cell and molecular biology**, Vol. 74, Issue 4, pp. 652-62, (2013) (PubMed).

Latijnhouwers, Xu, Muoller: "Arabidopsis stromal 70-kDa heat shock proteins are essential for chloroplast development." in: **Planta**, (2010) (PubMed).

Perreault, Dionne, Didur, Juneau, Popovic: "Effect of cadmium on photosystem II activity in Chlamydomonas reinhardtii: alteration of O-J-I-P fluorescence transients indicating the change of apparent activation energies within photosystem II." in: **Photosynthesis research**, (2010) (PubMed).

Images



Western Blotting

Image 1. From left to right: Arabidopsis thaliana, Horderum vulgare, Chlamydmononas reinhardtii, Synechococcus sp. 7942, Anabaena 7120 (2 ug of total cellular protein was loaded per lane)